

PATENT CASE NO. 56/414

## IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

| In re Application:       | )                      |
|--------------------------|------------------------|
|                          | )                      |
| Norbert Huber et al.     | )                      |
|                          | ) Group Art Unit: 2836 |
|                          | )                      |
| Serial No.: 10/656,924   | )                      |
|                          | ) Examiner: unassigned |
| Filed: September 5, 2003 | )                      |
|                          | )                      |
| For: CHARGING CIRCUIT    | T FOR A )              |
| FREQUENCY CONV           | ERTER )                |

## INFORMATION DISCLOSURE STATEMENT

Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450

Sir:

In compliance with Applicants' duty of disclosure under 37 C.F.R. § 1.56 and in conformance with 37 C.F.R. §§ 1.97-1.98, Applicants hereby submit the following references for consideration by the Examiner. Copies of the references are enclosed along with a completed copy of Form PTO-1449.

# I. <u>DISCLOSURE</u>

#### A. <u>U.S. Patents</u>

| Patent No.   | Inventor    | Issue Date |
|--------------|-------------|------------|
| 6,388,906 B1 | Ferstenberg | 05/14/02   |
| 6,603,672 B1 | Deng et al. | 08/05/03   |

## B. <u>U.S. Patent Application Publications</u>

| Publication No. | Inventor     | Publication Date |
|-----------------|--------------|------------------|
| 2003-0067303    | Huber et al. | 04/10/03         |

## C. Foreign Patent References

| Reference No. | Country | <b>Publication Date</b> |
|---------------|---------|-------------------------|
| 195 08 348 A1 | Germany | 09/12/96                |
| 197 41 300 A1 | Germany | 03/25/99                |
| 101 55 182 A1 | Germany | 05/29/02                |
| 101 48 740 A1 | Germany | 04/17/03                |

# II. <u>DISCUSSION</u>

#### A. <u>U.S. Patent No. 6,388,906</u>

The '906 patent reference was cited as an X-type reference in a Search Report for corresponding German patent application 102 41 036.4. An X-type reference is pertinent when taken alone.

## B. German Reference No. 195 08 348

Based solely on the drawings and the enclosed English language abstract, the '348 patent reference is pertinent because it appears to disclose a bridge rectifier network having three

thyristors, controllable by a pulse generator, and three uncontrolled diodes. The '348 patent reference was cited as an A-type reference in a Search Report for corresponding German patent application 102 41 036.4. An A-type reference is not considered pertinent to patentability and provides technical background.

#### C. German Reference No. 197 41 300

Based solely on the drawings and the enclosed English language abstract, the '300 patent reference is pertinent because it appears to disclose a circuit arrangement to charge a condenser for a converter containing a fan motor with at least one motor winding assigned to at least one rectifier branch. The '300 patent reference was cited as an A-type reference in a Search Report for corresponding German patent application 102 41 036.4.

### D. German Reference No. 101 55 182

Based solely on the drawings and the enclosed English language abstract, the '182 patent reference is pertinent because it appears to disclose a system that has two power conversion stages, one stage selectively rectifies a signal and the other stage selectively modifies the frequency of the signal. It is believed that U.S. Patent No. 6,603,672 corresponds to the '182 patent reference. The '182 patent reference was cited as a Y-type reference in a Search Report for corresponding German patent application 102 41 036.4. A Y-type reference is pertinent when combined with one or more Y-type references.

### E. German Reference No. 101 48 740

Based solely on the drawings and the enclosed English language abstract, the '740 patent reference is pertinent because it appears to disclose a method for fault monitoring for a power rectifier drive, wherein a switch for connecting a current rectifier to a voltage source is only

activated when the potential of a capacitor terminal changes by a preset amount. It is believed

that U.S. Patent Application Publication No. 2003-0067303 corresponds to the '740 patent

reference. The '740 patent reference was cited as an A-type and D-type reference in a Search

Report for corresponding German patent application 102 41 036.4.

III. **CONCLUSION** 

It is believed that none of these references, alone or in combination, disclose or suggest

the invention claimed. However, Applicants wish to make it clear that the disclosure of the

above references is in no way an admission that they qualify as prior art. It is Applicants' desire,

however, to have these references available in the record for both the Examiner and the public to

see. Applicants therefore request that the Examiner review the entire disclosure of each

reference and make the above-listed references of record.

Respectfully submitted,

John C. Freeman

Registration No. 34,483

Attorney for Applicants

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Dated: December 23, 2003

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| FORM PTO-1449                        | SERIAL NO.                  | CASE NO.       |
| My o 70 or winter                    | 10/656,924                  | 56/414         |
| LIST OF PATENTS AND PUBLICATIONS FOR | FILING DATE                 | GROUP ART UNIT |
| APPLICANT'S INFORMATION DISCLOSURE   | September 5, 2003           | 2836           |
| STATEMENT                            |                             |                |
| (use several sheets if necessary)    | APPLICANT(S): Norbert Huber | et al.         |

#### REFERENCE DESIGNATION

#### **U.S. PATENT DOCUMENTS**

| EXAMINER<br>INITIAL |    | DOCUMENT NUMBER Number-Kind Code (if known) | DATE       | NAME        | CLASS/<br>SUBCLASS | FILING<br>DATE |
|---------------------|----|---|------------|-------------|--------------------|----------------|
|                     | A1 | 6,388,906 B1                                | 05/14/2002 | Ferstenberg |                    |                |
|                     | A2 | 6,603,672 B1                                | 08/05/03   | Deng et al. |                    |                |

#### REFERENCE DESIGNATION U.S. PATENT APPLICATION PUBLICATIONS

| EXAMINER<br>INITIAL |    | DOCUMENT NUMBER Number-Kind Code (if known) | DATE     | NAME          | CLASS/<br>SUBCLASS | FILING<br>DATE |
|---------------------|----|---|----------|---------------|--------------------|----------------|
|                     | A3 | 2003-0067303                                | 04/10/03 | Hubert et al. |                    |                |

#### **FOREIGN PATENT DOCUMENTS**

| EXAMINER<br>INITIAL |    | DOCUMENT NUMBER Number-Kind Code (if known) | DATE       | COUNTRY | CLASS/<br>SUBCLASS | TRANSLATION<br>YES OR NO |
|---------------------|----|---|------------|---------|--------------------|--------------------------|
|                     | A4 | 195 08 348 A1                               | 09/12/1996 | Germany | χů ;               | Yes                      |
|                     | A5 | 197 41 300 A1                               | 03/25/1999 | Germany | 4 .                | Yes                      |
|                     | A6 | 101 55 182 A1                               | 05/29/2002 | Germany |                    | Yes                      |
|                     | A7 | 101 48 740 A1                               | 04/17/2003 | Germany | 47                 | Yes                      |

| EXAMINER | OTHER ART – NON PATENT LITERATURE DOCUMENTS   |
|----------|---|
| INITIAL  | (Include name of author, title of the article (when appropriate), title of the item (book, magazine, journal, serial, |
|          | symposium, catalog, etc.), date page(s), volume-issue number(s), publisher, city and/or country where published.      |

| EXAMINER | DATE CONSIDERED |
|----------|-----------------|
|          |                 |

EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

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|                      | TRANSMITTAL LETTE       | R          | Case No. 56/414 |   |
|----------------------|-------------------------|------------|-----------------|---|
| Serial No.           | Filing Date             | Examiner   | Group Art Unit  | - |
| 10/656,924           | September 5, 2003       | Unassigned | 2836            |   |
| Inventor(s)          |                         |            |                 |   |
| Norbert Huber et al. |                         |            |                 |   |
| Title of Invention   |                         |            |                 |   |
| CHARGING CIRCUIT FOR | R A FREQUENCY CONVERTER |            |                 |   |

| cited refe    | Transmitted her                           |                   |   |                              |               |                                    |              |          |                    |             |
|---------------|---|-------------------|---|------------------------------|---------------|------------------------------------|--------------|----------|--------------------|-------------|
| cited refe    |   |                   | nsmittal Letter (in   | duplicate); Inform           | atior         | Disclosure S                       | tatement; f  | PTO 144  | 19 along with      | seven       |
|               | erences; Postcard                         | Evidencing        | Receipt.  |                              |               |                                    |              |          |                    |             |
|               | Small entity st submitted.                | atus of this      | s application unde  | er 37 CFR § 1.2              | 27 h          | as been esta                       | blished by   | verified | d statement p      | orevious    |
|               | Applicant claims                          | s small entit     | y status. See 37 (  | CFR1.27.                     |               |                                    |              |          |                    |             |
|               | Petition for a                            | month             | extension of time.  |                              |               |                                    |              |          |                    |             |
|               | No additional fe                          | e is required     | l.  |                              |               |                                    |              |          |                    |             |
|               | The fee has bee                           | n calculated      | l as shown below:   |                              |               |                                    |              |          |                    |             |
|               |   |                   |   |                              |               | Small                              | Entity       |          | Other<br>Small     |             |
|               | Claims<br>Remaining<br>After<br>Amendment |                   | Highest No.<br>Previously<br>Paid For                           | Present<br>Extra             |               | Rate                               | Add'I<br>Fee | or       | Rate               | Add'<br>Fee |
| Total         | Amendment                                 | Minus             |   | :                            | ļ ·           | x \$9=                             |              | -        | x \$18=            |             |
| Indep.        |   | Minus             |   |                              |               | x 43=                              | ,            |          | _ x \$86=          |             |
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|               | The Commission any patent appli           | ner is hereb      | y authorized to cha<br>essing fees under 3<br>1925. A duplicate | arge payment of a            | ny a<br>socia | additional filing<br>ted with this |              |          |                    |             |
| $\boxtimes$   | = =                                       | ny associate      | CFR § 1.136(a) fed fees which have                              | •                            |               | •                                  |              |          |                    | •           |
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|               |   |                   |   | Registration<br>Attorney for | App           | licant                             |              |          |                    |             |
| P.O. BOX      | O, ILLINOIS 6061                          |                   |   | Customer No                  | o. OC         | 0757 - Brinks∶                     | noter Gilsoi | n Lione  |                    |             |
|               | tify that this correspond                 | ance is being de  | posited with the United S                                       | tates Postal Service as      |               |                                    |              |          |                    |             |
| first class m | ail, with sufficient posta                | ige, in an envelo | pe addressed to:<br>ria, VA 22313-1450, on <u>[</u>             | December 23, 2003.           |               |                                    |              |          |                    |             |